

Instructions for Defining Latitude and Longitude

Latitude and longitude are defined in degrees, minutes and seconds. There are 60 seconds in a minute and 60 minutes in a degree. The symbols are as follows ° = degree, ' = minute and " = seconds. The following example may help you determine the Latitude and Longitude for your Walk.

Longitude

Look at the right side (upper or lower corner) under the map name, or the second of two numbers separated by "x", to find the width scale (longitude) of the map:

- 1) If "7.5 Minute Series," enter 450.

Your Work

Example

If "15 Minute Series," enter 900.

If "7.5x15" Minute Series," enter 900.

If "15x30 Minute Series," enter 900.

- 2) Using a ruler, measure the width of your map east to west (exclude borders).

- 3) Divide #1 by #2 to the nearest whole number

- 4) Enter the Longitude located in the lower right hand corner.

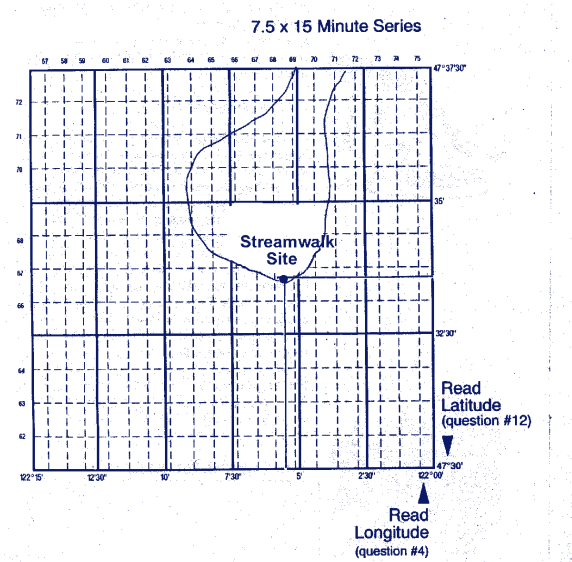
- 5) Using a ruler, measure (centimeters) from your site, straight across, to the right hand side of the map.

- 6) Multiply #5 by #3 (to the nearest whole number).

- 7) Convert #6 to minutes and seconds by dividing by 60. Your whole number after division is the number of minutes, and the remainder is the number of seconds. (Do not use a calculator.) For example, 215 can be divided by 60 three times. $215 - 180 = 35$. So 215 converts to 3°35".

- 8) Add #4 to #7.

The Answer for #8 is the Longitude of your site.



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_____	_____	900
_____ cm	10	cm
_____ sec/cm	90	sec/cm
_____	122°00'	
_____ cm	3.7	cm
_____	3.7x90=333	
	333/60=5 (300 with 33 left over, or 5' 33")	
_____	122°	
_____	5'	
_____	33'	



Latitude

Look at the right side (upper or lower corner) under the map name, or the second of two numbers separated by "x", to find the height scale (latitude) of the map:

- 9) If "7.5 Minute Series," enter 450.
If "15 Minute Series," enter 900.
If "7.5x15" Minute Series," enter 450.

Your Work

Example

450

- 10) Using a ruler, measure the length of your map north to south (exclude borders).

_____ cm

10 cm

- 11) Divide #9 by #10 to the nearest whole number

_____ sec/cm

45 sec/cm

- 12) Enter the Latitude located in the lower right hand corner.

47°30'

- 13) Using a ruler, measure (centimeters) from your site, straight down, to the bottom of the map.

_____ cm

4.8 cm

- 14) Multiply #13 by #11 (to the nearest whole number).

_____ .

4.8x45=216

- 15) Convert #14 to minutes and seconds by dividing by 60. Your whole number after division is the number of minutes, and the remainder is the number of seconds. (Do not use a calculator.) For example, 215 can be divided by 60 three times. $215 - 180 = 35$. So 215 converts to 3'35".

216/60=3
(180 with
36 left
over, or
3'36"

- 16) Add #15 to #12.

The Answer for #16 is the Latitude of your site.

47°

33'

36'

